

* SWBAT solve momentum and impulse word problems

Sep 6-2:31 PM

Welcome!!!

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* Pick up:

- white board, eraser, marker
- slip of paper (for later)

Opening Question:

How many can you think of:

Safety from taking more TIME to bring something to a stop

MITT

AIRBAGS

BRAKES

MATS

GLOVES

PADS

HELMETS

TRAMPOLINE

Tests back...

Centering...



SECA Physics
Wednesday 17 December 2014

Sep 7-7:04 AM

Momentum is ^{MASS} INERTIA ^{VELOCITY} IN MOTION

$$\text{mom.} = m \cdot v$$

Impulse is CHANGE in momentum

$$I = \Delta \text{mom.}$$

Impulse = Force X Time

$$I = F \cdot t$$

Dec 5-9:21 AM

Worksheet:

On your white board:

- what are you given in the question?
- what do you want to find out?
- so then, which equation?

#1) $1500 \text{ kg} = m$
 $27 \text{ m/s} = v$
 $\text{mom.} = ?$

$$\text{mom.} = m \cdot v$$

#2 BOWLING BASEBALL
 $7 \text{ kg} = m$ $0.12 \text{ kg} = m$
 $1.5 \text{ m/s} = v$ $30 \text{ m/s} = v$
 $\text{mom.} = ?$

$$\text{mom.} = m \cdot v$$

#3 A) $200 \text{ N} = F$
 $0.05 \text{ s} = t$
 $I = ?$

$$I = F \cdot t$$

B) $I = \Delta \text{mom.}$



#4 a)



UNITS

$$7 \text{ kg} \cdot 1.5 \text{ m/s} = 10.5 \text{ kg} \cdot \frac{\text{m}}{\text{s}}$$

$$\text{N} \cdot \text{s} \stackrel{?}{=} \text{kg} \cdot \frac{\text{m}}{\text{s}}$$

Dec 11-10:07 AM

Daily 3 Questions

CP: Create and solve a word problem involving impulse

- * Every day except test/project days
- * 3 Questions on the topics of the day
- * Main source of daily points
- * I am happy to give credit when I have no concerns about someone giving or getting help with the answers.

You can't get your points if you don't have your NAME!!!

Name	Period
1.	
2.	
3.	

Sep 9-7:32 AM

1. What is one safety device that increases time of stopping to decrease force?

MITT, BRAKES, PADS . . .

2. Force = 200 N and Time = 0.05 sec

What is the impulse?

$$I = F \cdot t = 200 \text{ N} \times 0.05 \text{ s} = 10 \text{ N}\cdot\text{s}$$

3. (Very easy question!) A ball experienced a change in momentum of 6.0 kg*m/s. What is the impulse on the ball?

$$I = \Delta \text{mom.} = 6.0 \frac{\text{kg}\cdot\text{m}}{\text{s}}$$

Dec 2-7:55 AM